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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,144	12/05/2001	Masaki Mizuochi	1743/198	3874

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EXAMINER

KALIVODA, CHRISTOPHER M

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,144

Applicant(s)

MIZUOCHI ET AL.

Examiner

Christopher M. Kalivoda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-19 and 24-27 is/are allowed.
- 6) ☐ Claim(s) 20-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 05 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

Figure 12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

- a. Figure 3 shows reference sign 21C not mentioned in the specification
- b. Figure 12 shows reference signs 17 and 18 not mentioned in the specification.

The drawings are also objected to because of small typographical errors. In Figures 4 - 6, reference sign 8 should be reference sign 11 – the sample chamber cover. In addition, in figures 7-11, reference sign 211 should be 21I. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. One example is found on page 18, line 13. There appears to be a typographical error and ref sign 21F should be 21E.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter regarding independent claims 1, 7, 18, and 19. The applicant filed an application (application number 10/002144) entitled "Evacuation Use Sample Chamber and Circuit Pattern Forming Apparatus Using the Same" on December 5, 2001. A review of prior art failed to disclose or make obvious a table with a recessed portion for mounting a sample and a groove portion surrounding the recessed portion and a pipe which communicates with the groove portion and evacuates a gas between a bottom face of a cover and top face of the table.

Claims 2 – 6 and 24 are allowable because they depend upon claim 1 or claims that depend upon claim 1.

Claims 8 – 17 and 25 are allowable because they depend upon claim 7 or claims that depend upon claim 7.

Claim 26 is allowable because it depends upon claim 18.

Claim 27 is allowable because it depends upon claim 19.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20 - 23 are rejected under 35 U.S.C. 102(b) as being taught by Taniguchi, et al. U.S. Patent 4,475,223. Regarding claim 20, Taniguchi, et al. teach an evacuation device comprising:

a. a table for supporting a sample, said table having an evacuation portion (see Figure 5, ref sign 22 and col 5, line 30-33). The wafer deforming chuck 22 can be thought of as a table since it supports wafer 11. There is also an evacuation portion under the wafer (see Fig 6b and column 6, lines 6-18).

b. a movable stage for holding said table (see Fig 5, ref sign 25); and

c. a pipe which communicates said evacuation portion, for evacuating a gas between a top surface of said table and a surface facing the top surface of said table (see Fig 6b, ref sign 37 and column 6, lines 6-18). In this instance, "a top surface" of said table could be broadly interpreted to include the top of any surface since there are

several surfaces on the table. A surface facing the top surface could be interpreted as the backside of the wafer 11.

Regarding claim 21, Taniguchi, et al. teaches a sample chamber comprising a main body; and an evacuation device according to claim 20 as described above which is provided in said main body (see Fig 5, ref sign 13).

Regarding claims 22 and 23, Taniguchi, et al. teach an exposure/inspection apparatus comprising a sample chamber according to claim 21 as described above; and a system for irradiating exposure beams onto a sample in said sample chamber (see Fig 5, ref sign 14). Taniguchi, et al. indicates the use of an X-ray exposure system for use with silicon wafers, bubble wafers, or printed circuit substrates (see column 1, lines 4-8).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Kalivoda whose telephone number is (703)-305-7443. The examiner can normally be reached on Monday - Friday (8:30 - 5:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (703)-308-4116. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703)-872-9318 for regular communications and (703)-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

cmk
April 24, 2003


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000